

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P882581

Luminaire Tested: **NAV-SB2C-735-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15086 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

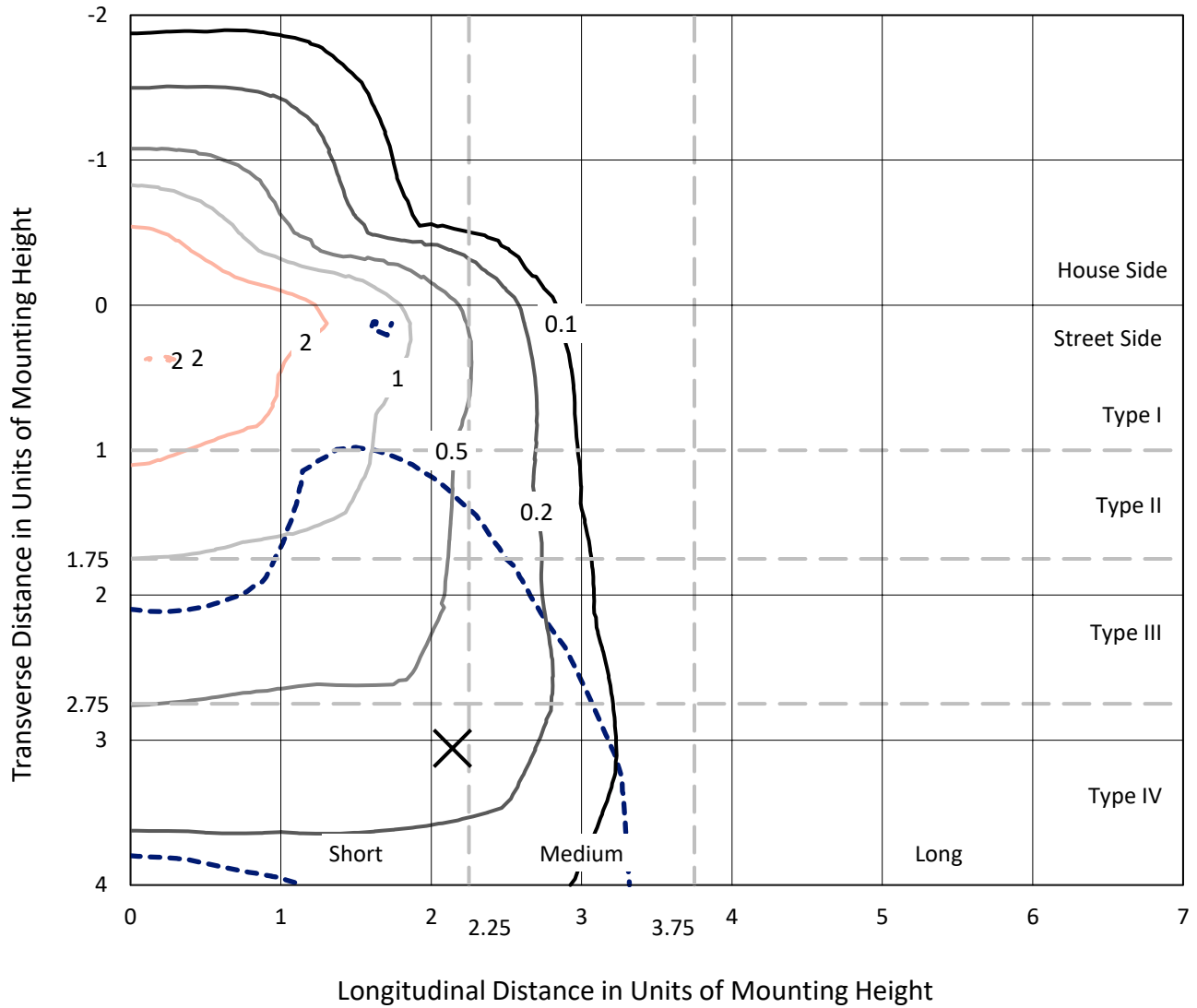
Input Watts (W): 100.9
Input Voltage (V): 120.0
Input Current (Ain): 0.857
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

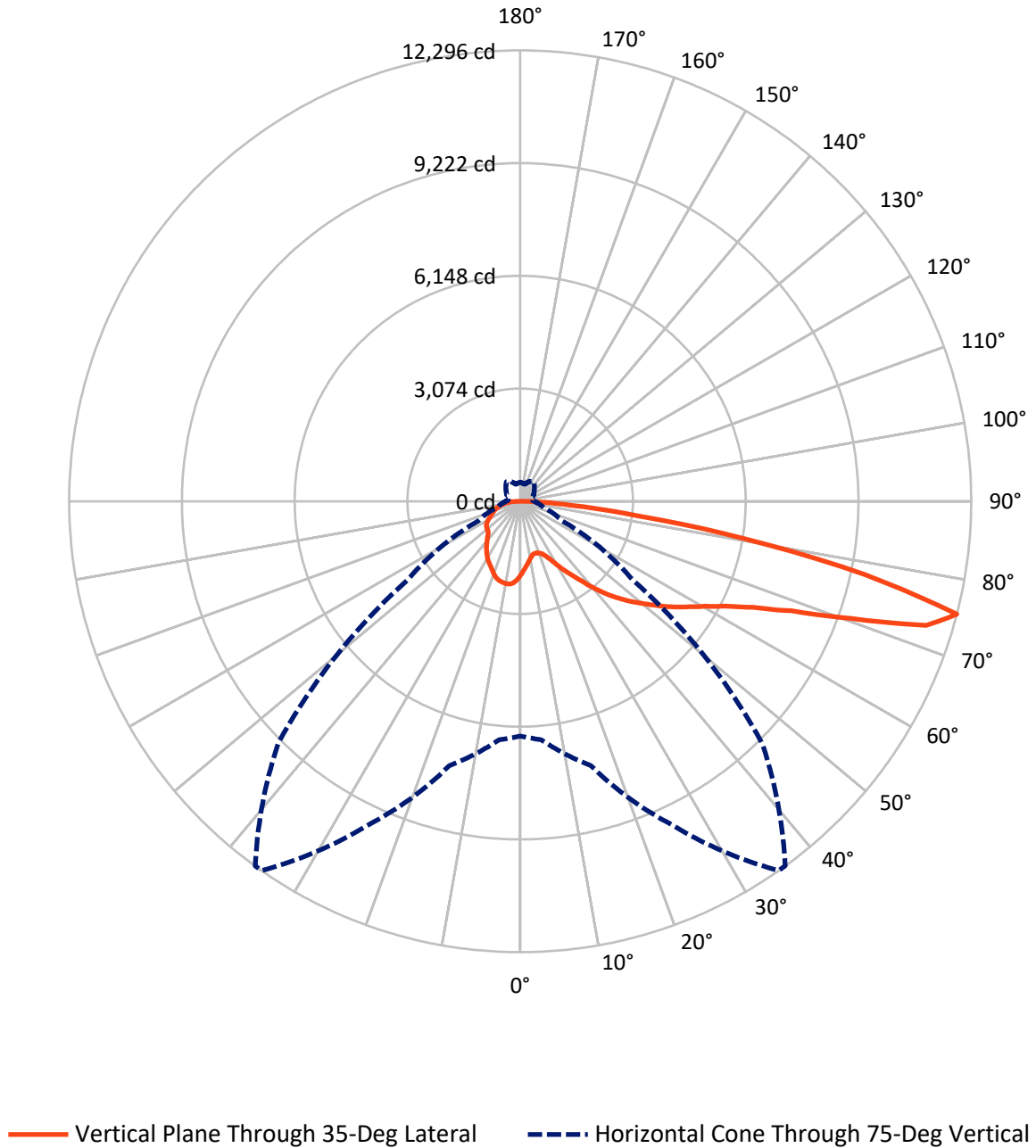
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3590.1	0.0	3590.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	11495.9	0.0	11495.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	15086.0	0.0	15086.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.3	1.3
10°-20°	549.0	3.6
20°-30°	921.9	6.1
30°-40°	1432.8	9.5
40°-50°	2126.7	14.1
50°-60°	2936.0	19.5
60°-70°	3562.0	23.6
70°-80°	2943.8	19.5
80°-90°	423.4	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	15086.0	100.0
0°-180°	15086.0	100.0

Coefficient of Utilization



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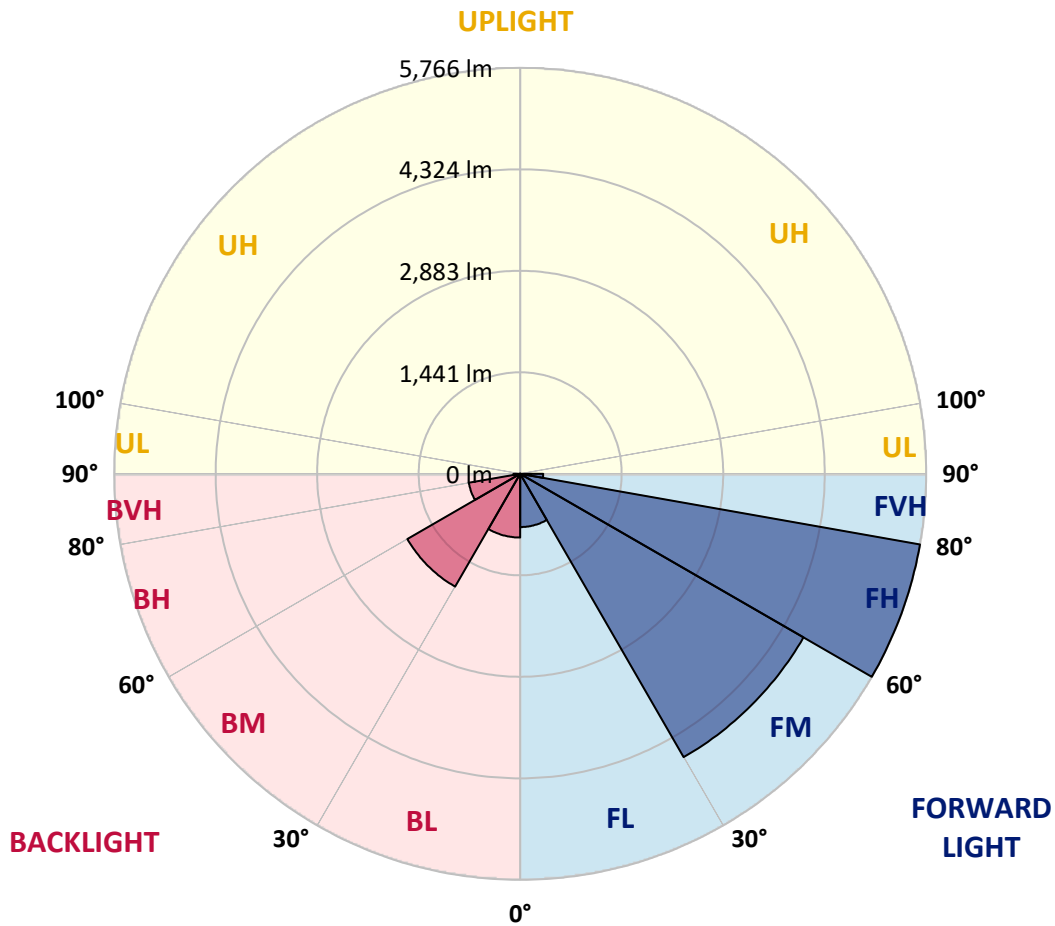
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	756.5	5.0			
FM (30°-60°)	4645.7	30.8			
FH (60°-80°)	5765.6	38.2			G3/7500
FVH (80°-90°)	328.1	2.2			G3/500
BL (0°-30°)	904.8	6.0	B2/1000		
BM (30°-60°)	1849.8	12.3	B2/2500		
BH (60°-80°)	740.2	4.9	B2/1000		G2/1000
BVH (80°-90°)	95.3	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3
2.5°	1853.7	1865.1	1870.0	1867.6	1879.8	1878.2	1895.3	1916.5	1945.9	1974.4	2016.0
5°	1711.0	1723.2	1733.8	1743.6	1767.3	1774.6	1801.5	1842.3	1896.1	1950.8	2019.3
7.5°	1578.1	1588.7	1605.0	1622.9	1662.9	1670.2	1715.1	1778.7	1853.7	1933.7	2028.3
10°	1469.6	1480.2	1497.3	1517.7	1567.5	1576.4	1633.5	1718.3	1816.2	1917.3	2038.0
12.5°	1423.1	1426.4	1436.2	1456.6	1499.8	1505.5	1568.3	1665.3	1779.5	1905.1	2052.7
15°	1420.7	1427.2	1428.0	1438.6	1474.5	1476.9	1534.9	1631.1	1756.7	1902.7	2074.7
17.5°	1445.1	1450.0	1442.7	1449.2	1479.4	1483.5	1529.1	1614.8	1749.3	1913.3	2112.3
20°	1510.4	1514.5	1492.4	1483.5	1505.5	1508.8	1553.6	1625.4	1756.7	1935.3	2163.6
22.5°	1649.0	1651.5	1597.6	1560.9	1562.6	1564.2	1603.4	1668.6	1785.2	1975.2	2228.9
25°	1865.1	1863.5	1777.9	1706.9	1666.2	1657.2	1683.3	1738.7	1833.3	2028.3	2312.9
27.5°	2118.0	2105.7	2020.1	1914.1	1825.2	1812.1	1806.4	1830.1	1901.8	2098.4	2415.6
30°	2403.4	2392.0	2299.8	2161.2	2038.0	2016.8	1963.0	1950.8	2003.8	2193.8	2558.4
32.5°	2716.6	2709.2	2599.1	2431.1	2266.4	2241.9	2151.4	2118.8	2160.4	2338.2	2757.3
35°	2979.2	2972.7	2881.3	2708.4	2507.0	2476.8	2384.6	2347.9	2369.2	2523.3	3017.5
37.5°	3216.5	3213.2	3134.9	2998.7	2790.8	2754.1	2650.5	2638.3	2634.2	2767.1	3333.1
40°	3436.7	3428.5	3347.0	3275.2	3121.1	3087.6	2996.3	2985.7	2954.7	3067.3	3690.3
42.5°	3680.5	3659.3	3541.1	3507.6	3466.1	3438.3	3383.7	3385.3	3316.8	3405.7	4068.7
45°	3879.5	3867.3	3745.8	3726.2	3771.1	3759.6	3807.0	3819.2	3686.3	3760.5	4461.8
47.5°	4093.2	4081.8	3979.0	3965.2	4086.7	4089.9	4257.1	4261.2	4046.7	4129.1	4855.7
50°	4356.6	4340.3	4238.4	4255.5	4391.7	4403.9	4709.8	4682.0	4378.6	4503.4	5246.4
52.5°	4530.3	4540.1	4518.1	4545.8	4731.8	4743.2	5155.0	5084.1	4707.3	4872.9	5629.7
55°	4658.4	4678.0	4746.5	4810.1	5090.6	5102.0	5575.0	5466.6	4979.7	5215.4	5990.2
57.5°	4823.1	4795.4	4923.4	5047.4	5431.5	5461.7	5983.6	5835.2	5221.1	5510.6	6237.3
60°	5059.6	5040.1	5139.5	5323.0	5813.2	5861.3	6415.9	6167.1	5398.1	5744.7	6285.4
62.5°	5539.2	5490.2	5505.7	5668.0	6294.4	6358.0	6903.6	6456.6	5486.2	5836.0	6027.7
65°	6256.0	6172.0	6093.7	6206.3	6972.1	7034.9	7454.1	6684.2	5453.5	5659.0	5343.4
67.5°	7158.8	7075.6	6979.4	7085.4	7970.3	8020.0	8133.4	6812.2	5196.6	4977.3	4134.0
70°	7903.4	7872.4	7987.4	8423.7	9564.7	9566.3	9004.4	6706.2	4492.8	3528.9	2392.0
72.5°	7804.7	7786.0	8391.9	9740.8	11574.2	11531.0	9828.9	5903.7	3026.5	1591.9	896.3
75°	6402.8	6524.3	7463.0	9717.2	12295.9	12290.2	9324.1	3753.1	1251.9	659.8	463.2
77.5°	3433.4	3625.9	4845.1	7174.3	9598.9	9743.3	6555.3	1313.0	537.4	422.5	320.5
80°	1119.7	1287.7	1931.2	3652.8	6237.3	6210.4	2809.5	515.4	367.8	299.3	221.8
82.5°	475.5	495.0	862.8	1724.9	3201.0	3151.3	894.6	296.0	258.5	204.7	137.0
85°	185.9	208.0	380.9	797.6	1386.4	1356.2	323.0	146.8	165.6	133.7	81.6
87.5°	61.2	74.2	136.2	273.2	431.4	415.9	79.1	50.6	71.8	61.2	29.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3	2010.3
2.5°	2027.4	2040.5	2056.0	2078.8	2098.4	2114.7	2131.8	2142.4	2146.5	2158.7	2157.9
5°	2042.1	2070.7	2109.0	2146.5	2183.2	2205.2	2224.8	2234.6	2243.6	2250.1	2251.7
7.5°	2066.6	2103.3	2163.6	2212.6	2243.6	2261.5	2274.5	2271.3	2274.5	2276.2	2278.6
10°	2087.8	2139.2	2210.9	2257.4	2281.1	2281.9	2278.6	2267.2	2261.5	2262.3	2263.9
12.5°	2113.1	2170.2	2247.6	2286.8	2293.3	2275.4	2261.5	2241.9	2234.6	2231.3	2229.7
15°	2147.3	2212.6	2287.6	2302.3	2286.0	2263.1	2239.5	2207.7	2191.4	2178.3	2182.4
17.5°	2188.9	2260.7	2318.6	2308.0	2272.9	2235.4	2197.1	2149.0	2115.5	2101.7	2102.5
20°	2246.8	2311.2	2342.2	2295.8	2242.7	2185.7	2120.4	2061.7	2030.7	2016.8	2015.2
22.5°	2317.0	2378.9	2365.1	2274.5	2199.5	2108.2	2026.6	1983.4	1967.9	1958.1	1959.7
25°	2401.0	2454.0	2381.4	2243.6	2128.6	2005.4	1942.6	1928.8	1921.4	1914.1	1914.1
27.5°	2510.2	2538.8	2393.6	2197.9	2017.7	1896.1	1873.3	1875.7	1873.3	1861.1	1863.5
30°	2654.6	2648.9	2405.0	2123.7	1890.4	1797.5	1799.1	1809.7	1811.3	1803.2	1807.2
32.5°	2844.6	2786.7	2410.7	2027.4	1768.9	1711.0	1712.6	1724.1	1732.2	1718.3	1724.9
35°	3074.6	2947.4	2401.8	1906.7	1675.1	1628.6	1616.4	1619.7	1622.1	1609.1	1618.0
37.5°	3342.9	3127.6	2361.8	1773.0	1597.6	1547.9	1521.8	1499.8	1486.7	1474.5	1482.7
40°	3637.3	3324.2	2288.4	1642.5	1511.2	1462.3	1423.1	1381.5	1337.5	1321.2	1328.5
42.5°	3945.6	3526.4	2199.5	1517.7	1411.7	1371.7	1330.1	1269.8	1203.7	1170.3	1174.4
45°	4265.3	3733.6	2112.3	1394.6	1309.8	1292.6	1244.5	1171.9	1100.2	1057.8	1054.5
47.5°	4578.5	3929.3	1984.2	1270.6	1214.3	1233.1	1195.6	1128.7	1048.8	981.9	974.6
50°	4877.8	4112.8	1774.6	1145.0	1136.9	1215.2	1179.3	1083.0	991.7	906.1	898.7
52.5°	5174.6	4261.2	1506.3	1030.8	1095.3	1210.3	1158.1	1052.0	940.3	850.6	840.8
55°	5426.6	4337.9	1247.8	933.0	1034.9	1168.7	1132.8	1015.4	867.7	772.3	764.2
57.5°	5570.2	4275.9	1032.5	836.7	951.7	1100.2	1089.6	937.1	781.3	707.9	698.1
60°	5508.2	4024.7	856.3	752.7	872.6	1026.0	1014.5	859.6	715.2	645.9	636.1
62.5°	5166.5	3546.0	716.9	679.3	800.9	950.1	939.5	800.0	664.7	597.8	587.2
65°	4478.1	2884.6	608.4	618.2	728.3	858.8	874.3	750.3	624.7	559.5	548.9
67.5°	3415.5	2089.4	523.6	565.2	657.3	769.1	813.9	714.4	591.3	529.3	519.5
70°	1946.7	1186.6	451.8	513.8	594.5	685.9	767.4	685.9	555.4	504.0	497.5
72.5°	738.1	544.8	390.6	462.4	534.2	615.7	716.0	641.0	513.8	475.5	468.9
75°	393.9	331.9	328.7	402.1	464.9	547.2	651.6	597.0	482.8	502.4	518.7
77.5°	268.3	234.9	274.8	344.2	389.0	471.4	583.1	530.1	418.4	416.7	384.1
80°	185.9	166.4	223.5	277.3	300.9	396.4	508.9	455.1	340.9	318.1	304.2
82.5°	111.7	108.5	167.2	207.1	212.9	305.8	421.6	381.7	278.9	243.0	244.7
85°	61.2	64.4	106.8	121.5	124.0	213.7	330.3	295.2	214.5	180.2	181.9
87.5°	17.1	22.0	39.1	48.1	59.5	110.9	196.5	175.3	107.7	75.0	75.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)